

Through the Eyes of a Mariner: Touring the Port of Boston

By Jane W. Mead, CZM

A tour of Boston Harbor, an estuary sheltered by the arms of Winthrop and Hull, can take many forms. Ferrying around the Boston Harbor Islands, glacial drumlins of such natural and historic interest that they have been named a National Recreation Area, is a wonderful way to enjoy the beauty of the coast. When canoeing through local Areas of Critical Environmental Concern—the Neponset River Estuary, the Back River, and the Weir River—you can see the wildlife that gives statewide significance to these waterways. A stroll along Boston's Harborwalk provides a landside view of historic and cultural features that line the port.

This article gives a different kind of tour, a glimpse into the working waterfront of the Port of Boston, focusing on shipping. In the past year, about \$2 billion worth of cargo—loaded on container ships, petroleum tankers, bulk carriers, auto carriers, and cruise ships—traveled in and out of the Port of Boston. The land surrounding the Port supports facilities to process and handle fish and cargos that arrive from or depart to overseas locations. Connecting all is a complex transportation network of boats, trucks, trains, and airplanes riding on water, rail, roads, and air. Though the Port of Boston is somewhat less active than it was in its 19th to mid-20th Century heyday, there is still a lot going on. Working from the south to the north, our waterside tour will point out the places that vessels land and

discuss some recent events that affect commercial shipping in and out of the Port.

Quincy-Weymouth

The giant cranes of the old Fore River Shipyard still stand visible throughout the harbor. The cranes mark the Fore River Designated Port Area (DPA), an area maintained under state law for maritime industrial uses. The Fore River DPA is an area of intense activity these days. Though the recent attempt to re-open the shipyard failed, the federal Maritime Administration took bids from companies that proposed retail, residential, and marine industrial uses of the site. The winning bidder, a local car dealer, is working with the City of Quincy to attract a mix of uses to the site.

New England Fertilizer Company receives daily barge-loads of sludge from the Massachusetts Water Resources Authority's (MWRA) Deer Island treatment plant, where the sludge is converted to fertilizer pellets. Both CITGO and Sprague Energy operate tank farms on the Fore River, receiving cargos of oil and gasoline by tanker. Harbor Express provides water-borne commuter transportation to the airport and downtown Boston. The state Highway Department has constructed a temporary bridge over the Fore River and will be replacing the existing antiquated bridge in the coming years.

South Boston and the Inner Harbor

Moving to the northwest, we approach the Port of Boston proper on the recently dredged shipping channels. The U.S. Army Corps of Engineers and the Massachusetts Port Authority (Massport) have accomplished some long-needed channel deepening, bringing the main channel down to a depth of 40 feet below mean low water in the main shipping channel and the Mystic River and 38 feet in the Chelsea Creek (the top of the Ted Williams Tunnel is 40 feet below the surface at low tide, which limits the draft of ships that can go over it to something less than 40 feet). The two agencies are now preparing a feasibility study to dredge the main channels south of the Ted Williams Tunnel to -45 feet to accommodate the deeper draft of modern cargo ships headed to South Boston.

From the water, the Conley Container Terminal appears on the left in South Boston. In the mid-1990s, Massport reconfigured the two main terminals in the Port, consolidating container operations in South Boston and auto imports in Charlestown. At Conley, four cranes move containers on and off of specially designed ships, lowering the metal boxes onto truck chasses for transport out of the city via the Massport Haul Road and the Interstate Highway system.



unless otherwise noted, all photos by Jane W. Mead

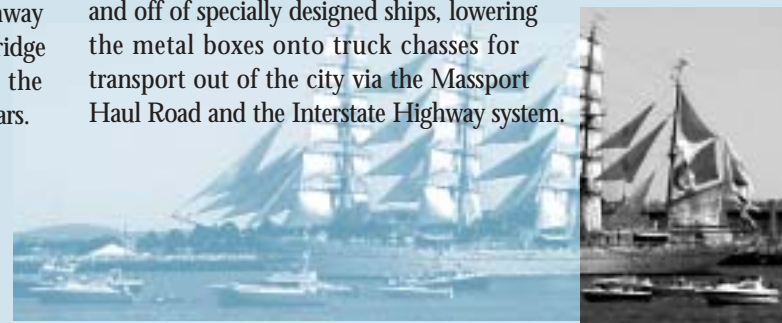
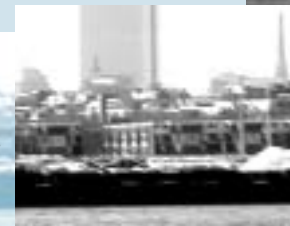


photo by Joseph Staub



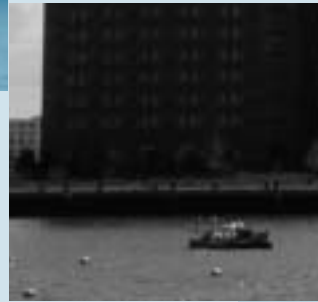
Containers that are to be moved by rail must be trucked to the CSX Beacon Yards in Brighton and then transferred to inter-modal railroad cars for shipment.

The past few years have seen international changes in the ways that importers and exporters send and receive containerized cargo, and these changes have affected cargo operations in Boston. A 13-year-old vessel-sharing agreement among SeaLand, Maersk, and P&O Nedlloyd, under which all three companies carried cargo on the same ship once a week to and from Europe, expired in June of 2000, and was not renewed, ending that direct call to the region. Containers from these lines are now delivered from New York and Halifax, Nova Scotia, by feeder barge, an ocean-going barge that delivers containers from a call port to smaller surrounding regional ports. The Mediterranean Shipping Company, which now provides a ship to and from Europe each week, has increased its container volumes, however. A new service from Asia was initiated in January of 2002, linking New England directly with that market. This service—a cooperative effort of four steamship lines (China Ocean Shipping Company [COSCO], K-Line, Yang Ming Line, and Hanjin Shipping)—brings cargo to the United States via the Panama Canal. After calling Boston, the vessel carries export cargo to Europe. A recent addition to the COSCO service is a weekly export ship to Asia.

Goods that arrive in metal boxes include shoes from Italy, wines from France, beer, home goods, granite and marble, toys, foodstuffs, and clothing. Major containerized exports include lumber, paper, hides, medical supplies, and technical equipment.

Several multi-modal freight-forwarding companies are located in the South Boston Marine Industrial Park. These companies receive containers from ships and airport cargos at their facilities, sort their contents, and then re-ship the products to short- and long-haul customers. The opening of the Ted Williams Tunnel has made shipping and receiving to and from the airport and South Boston very convenient and South Boston has rapidly become a good place to locate these businesses.

Black Falcon Pier on the Reserved Channel is the place where the cruise ships dock when they are in Boston. Over the past decade, the cruise industry has become one of the most important segments of the Port economy. In 2002, there were 93 cruises carrying over 200,000 passengers. Trips that begin in Boston may be from one to 10 days or longer and sail to Bermuda, Canada, and Europe. The 24 hours that the ship is in port are frantic with activity



as passengers disembark, the ship is cleaned, new stores of food, water, and fuel are loaded, and new passengers are boarded.

Further into the Port is the Fish Pier. Once the home of a large fishing fleet, diminished stock and limits on days at sea have severely reduced the number of commercial fishing boats in Boston, as is the case all over New England. Interestingly though, Boston remains a major fish exporting port. Fish from other parts of the world are flown into Logan Airport and brought to fish plants in South Boston for processing and packaging. The newly transformed fish products are then returned to Logan where they are sent back out around the world. The Boston Lobstermen's Association is still quite active, fishing out of the Cardinal Medeiros dock on the Reserved Channel.

Downtown, scores of passenger boats take people on harbor tours, whale watching trips, and longer voyages across Massachusetts Bay to Provincetown. Commuter boats bring in workers from the North and South Shores. Continuing deeper into the harbor, we find the Coast Guard base, providing search and rescue, pollution control, and security for the Captain of the Port of Boston district, which runs from Maine to the Cape Cod Canal.

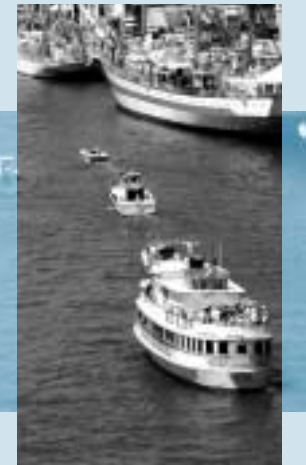
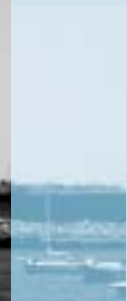


photo by Joseph Staub



Mystic River

The intersection of the Inner Harbor, the Mystic River, and Chelsea Creek is called the Confluence. Here, huge Liquid Natural Gas (LNG) tankers headed for the Distrigas Terminal on the Mystic are turned around by tugboats and pulled backward upriver, as they are too big to turn in the river. The natural gas arrives in port as a super-cooled liquid.

(To keep the gas cold, LNG ships are essentially very large Thermos™ bottles.) To ensure safe passage, a security team accompanies each of the ships. Through these efforts, Distrigas supplies about 15 percent of the natural gas used in the Boston-area market.

The Mystic River and neighboring Chelsea Creek are home to several bulk cargo terminals, where unconfined shipments of gypsum, salt, and cement are off-loaded and scrap metal is on-loaded for export. As car carriers draw relatively little water, once construction of the Ted Williams Tunnel limited future channel depths to -40 feet, Massport moved the entire auto importing business to Moran

Terminal in Charlestown when it consolidated container operations in South Boston. One container crane at Moran was removed and the other remains at the edge of the dock, where it is for sale. State-of-the-art auto processing facilities were constructed, and additional acres of backlands were paved to handle parking for just under 100,000 vehicles that pass through the Autoport each year. Unfortunately, despite all of these amenities, the biggest customer, Volkswagen, moved its operations to Rhode Island early in 2003. The Autoport expects to find another auto importer to take its place.

Chelsea Creek

At the mouth of Chelsea Creek, Eastern Minerals receives bulk salt from Chile, Mexico, the Caribbean, Egypt, and Australia. The salt is used by about 200 communities in eastern Massachusetts to melt winter snow and ice from streets and highways. An estimated 70 percent of the petroleum products—including home heating oil, gasoline, and jet fuel—that warm homes and move vehicles in the region are imported through

tank farms on Chelsea Creek. Petroleum tankers must pass both the McArdle Bridge in East Boston and the aging and very narrow Chelsea Street Bridge further upstream. The opening through the Chelsea Street Bridge is only 96 feet wide, making for some tricky going for the docking masters on the ocean-going tankers as they thread their way between the fenders. In fact, a special “Chelsea-class” of small tankers remain in service specifically because they fit through the bridge. This bridge is on the list for federal Truman-Hobbs funding for replacement, but construction probably won’t start for another few years.



photo by Tom Skinner





East Boston

Though East Boston was once home to ship-building companies and passenger and cargo wharves, the constrained local roadway system limits large-scale maritime operations. Consequently, the primary remaining maritime businesses are the pilots, the tugboat companies, and other maritime support industries. State pilots meet an incoming ship outside Boston Harbor at the "B" Buoy, about 13 miles offshore, go aboard, and command the ship until the tow boats pick up the ship, usually off of Commonwealth Pier. The docking masters go aboard once the tugboats have come alongside, and command the ship until it gets to the dock where it will discharge or take on cargo.

Future of the Port

Landside access to and from the Port is an on-going challenge. Truck routes follow city streets that were not designed either for 60-foot trailers or for the volume of traffic that they must handle. The problem has been further complicated by the route changes and temporary structures that have attended the construction of the Big Dig and the Ted Williams Tunnel. Construction of both the Big Dig and the Convention Center has interrupted rail service to South Boston, and rail to Moran Terminal in Charlestown has been suspended. Massport has taken several steps to alleviate these problems, including construction of a Haul Road from Northern Avenue out of South Boston to the Interstate system, and, with the Massachusetts Highway Department, construction of the South Boston By-Pass

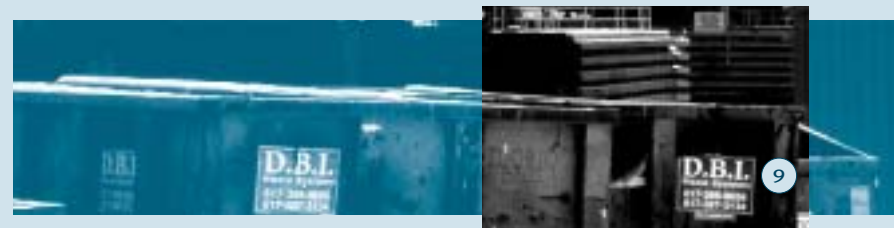
Road, relieving local streets of some truck traffic. Massport has acquired the railbed in Charlestown for another haul road to serve port businesses along the Mystic River.



The cleanup of Boston Harbor, availability of large parcels of land, and the desirability of urban living make residential and commercial development along the waterfront very profitable. Shipping is not, at this point, as profitable, but it is a vital component of the regional economy, generating about 9,000 jobs and an estimated \$8 billion in annual economic impact. Maritime industrial uses are now competing with housing and offices for space on the waterfront.



photo by Joseph Staub



Boston & Vicinity





Legend

1. FORE RIVER SHIPYARD
2. CITGO
3. RT 3A BRIDGE
4. CONLEY CONTAINER TERMINAL
5. BLACK FALCON PIER
6. FISH PIER
7. COAST GUARD BASE
8. DISTRIGAS
9. AUTOPORT
10. EASTERN MINERALS
11. CHELSEA STREET BRIDGE
12. TANK FARM
CHELSEA CREEK
13. BOSTON PILOTS
14. LOGAN AIRPORT